LOW-ACTIVITY SEALED RADIOACTIVE SOURCES AT THE APS

Changes made in this revision:

- No changes made to this procedure since its last review

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LOW-ACTIVITY SEALED RADIOACTIVE SOURCES AT THE APS

1 Prerequisite

Upon receipt make sure the proper documentation has been completed by Health Physics.

2 Policy

Scope - This policy describes how APS users will manage low-activity radioactive calibration sources that are certified* as sealed.

1. Purchasing/Transport – ANL employees ordering sealed sources receive approval through the PARIS system from Health Physics, ESH coordinator, and Radiation Safety Officer (RSO) before the order is placed. Non-ANL users must get an authorization memo from the SRS site coordinator before ordering all sealed sources. Argonne's Materials Control & Accountability (MC&A) will manage the delivery of all sources on site. Prior to shipment, MC&A personnel will assign a control number to the shipment and will provide instructions on the proper packaging, labeling, and addressing of the shipment. Under no circumstances may sealed radioactive sources be transported from one Argonne location to another in a personal vehicle.

2. Custodian - Requires Sealed Radioactive Source Custodian training (ESH709) and practical, Radioactive Material System (RMS) database training (ESH525)

3. Inventory - As soon as possible after a new source arrives at the APS, the source custodian will document it by entering it into the RMS database.

4. Storage - The source custodian will ensure that the sources are properly labeled, stored, and tested for integrity on a periodic basis. The sources must be stored in a locked cabinet, which is used only for that purpose. The preferred location for the cabinet is in one of the LOM labs assigned to the CAT/CDT/XSD; this lab will then be posted with the appropriate signage by Health Physics.

5. Tracking - The custodian will also be responsible for knowing the location of all sources at all times, authorizing users of the sources, and will ensure that all necessary records are maintained. The custodian will note any change of ownership (transfers) or location of the sealed source in the Radioactive Material System (RMS).

6. Securing the source - Authorized users will ensure that sealed sources are not left unattended and unsecured while checked out, and will return them promptly after

use. The source custodian may designate temporary storage locations where sealed sources can be secured while checked out. A sealed source that is in use inside a radiation enclosure for a calibration will be considered "secured" for the duration of the calibration period if all doors to the enclosure are closed, secured with lock and chain, and posted with appropriate signs.

7. Internal moves - Authorized users may move sealed sources between authorized areas within the APS facility (for example, to the Experiment Hall floor from the LOM lab where the source is stored); the user will promptly enter the new location in an acceptable tracking system. .

   * Per Argonne ESH manuals/LMS procedures, LMS-PROC-171 "Accountability and Control of Sealed Radioactive Sources."

3 TRAINING REQUIRED

The use of exempt radioactive sealed sources requires GERT (ESH738) training.
The use of non-exempt radioactive sealed sources requires Radiation Worker 1 (ESH700) training.

Training required to be a Sealed Source Custodian: Sealed Radioactive Source Custodian training (ESH 709), (Practical ESH709PR), and RMS database training (ESH 525).

4 FEEDBACK AND IMPROVEMENT

If you are using this procedure and have comments or suggested improvements for it, please go to the APS Policies and Procedures Comment Form* to submit your input to a Procedure Administrator. If you are reviewing this procedure in workflow, your input must be entered in the comment box when you approve or reject the procedure.

Instructions for execution-time modifications to a policy/procedure can be found in the following document: Field Modification of APS Policy/Procedure (APS_1408152).

* http://centraldocs.aps.anl.gov/comment_form.php